



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,966	07/14/2003	Andrew Harvey Barr	200205324	5920

7590 03/24/2004
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

VU, PHUONG T

ART UNIT	PAPER NUMBER
----------	--------------

2841

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/618,966	Applicant(s) BARR ET AL.	
	Examiner Phuong T. Vu	Art Unit 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 23-25 recite the limitation "the means for selectively positioning the card receptor end". There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 5-7, 10-11, 14-15, 18-19, 22-24, 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Cavanna (US 4,198,024). Regarding claim 1, the reference discloses a short card support 1 for supporting a short printed circuit card 21 inserted into an electronic system into which the short card support is positioned. The short printed circuit card having a first edge 35 not coupled to the electronic system, the short card support comprising a card guide end 3 adapted to couple to a card guide (comprising 15, 19) of the electronic system, a card receptor end (comprising 5, 7, 9) adapted to couple with the first edge of the short printed circuit card and a support span (comprising 23, 25) connecting the card guide end and the card receptor end.

Art Unit: 2841

Regarding claim 2, a span length of the short card support is adjustable.

Regarding claim 5, the short card support is made from an electrically non-conducting material.

Regarding claim 6, the electrically nonconducting material is plastic.

Regarding claim 7, the short card support is made from a material which is to an extent non-inflammable.

Regarding claim 10, the reference discloses a short printed circuit card assembly insertable into an electronic system comprising a printed circuit card 21 having a first edge 35 and a card support configured to couple to the first edge of the printed circuit card, the card support including a card guide end 3 adapted to couple to the electronic system, a card receptor end (comprising 5, 7, 9) adapted to couple to the first edge of the printed circuit card, and a support span (comprising 23, 25) connecting the card guide end and the card receptor end.

Regarding claim 11, a span length of the support span is adjustable.

Regarding claim 14, the short card support is made from an electrically non-conducting material.

Regarding claim 15, the electrically nonconducting material is plastic.

Regarding claim 18, the reference discloses a short printed circuit card assembly inserted into an electronic system comprising a printed circuit card 21 mechanically coupled to the electronic system on a first edge 35 and mechanically and electrically coupled to the electronic system on a connector edge and a printed circuit card support 1, wherein the printed card support comprises a card guide end 3 coupled to the

Art Unit: 2841

electronic system, a card receptor end (comprising 5, 7, 9) coupled with a second edge of the printed circuit card, and a support span (comprising 23, 25) connecting the card guide end and the card receptor end.

Regarding claim 19, a span length of the printed card support is adjustable.

Regarding claim 22, the reference discloses a short card support 1 for supporting a short printed circuit card 21 having a first edge in an electronic system having a card guide (comprising 15, 19), the short card support comprising a card guide 3 adapted to couple to the card guide of the electronic system, a card receptor end (comprising 5, 7, 9) adapted to couple with the first edge of the short printed circuit card, a support span 25 connecting the card guide end and the card receptor end and means 13 for selectively positioning the card receptor end for reception of the first edge of the short printed circuit card.

Regarding claim 23, the means for selectively positioning the card receptor end includes a stop assembly 7.

Regarding claim 24, the means for selectively positioning the card receptor is a clasp.

Regarding claim 30, the reference discloses an electronic system comprising a short card 21 inserted into the electronic system, the short card having a first edge 35 not coupled to the electronic system, and a support spanning 13 between the first edge of the short card and a card guide of the electronic system.

Regarding claim 31, the support is a short card support.

Regarding claim 32, the short card support is an adjustable short card support.

Regarding claim 33, the short card support includes a card guide end 3 adapted to couple to the card guide (comprising 15, 19) of the electronic system, a card receptor end (comprising 5, 7, 9) adapted to couple with the first edge of the short card, and a support span 25 connecting the card guide end and the card receptor end.

5. Claims 1-2, 5-7, 10-11, 14-15, 18-19, 22-24, 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Hsu et al. (US 5,383,793). Regarding claim 1, the reference discloses a short card support comprising (21, 41, 61) for supporting a short printed circuit card 83 inserted into an electronic system into which the short card support is positioned. The short printed circuit card having a first edge (adjacent 69) not coupled to the electronic system, the short card support comprising a card guide end 21 adapted to couple to a card guide 73 of the electronic system, a card receptor end 67 adapted to couple with the first edge of the short printed circuit card and a support span 64 connecting the card guide end and the card receptor end.

Regarding claim 2, a span length of the short card support is adjustable.

Regarding claim 5, the short card support is made from an electrically non-conducting material.

Regarding claim 6, the electrically nonconducting material is plastic.

Regarding claim 7, the short card support is made from a material which is to an extent non-inflammable.

Regarding claim 10, the reference discloses a short printed circuit card assembly (comprising 21, 41, 61) insertable into an electronic system comprising a printed circuit card 83 having a first edge (adjacent 69) and a card support 67 configured to couple to

Art Unit: 2841

the first edge of the printed circuit card, the card support including a card guide end 21 adapted to couple to the electronic system, a card receptor end 61 adapted to couple to the first edge of the printed circuit card, and a support span 41 connecting the card guide end and the card receptor end.

Regarding claim 11, a span length of the support span is adjustable.

Regarding claim 14 the short card support is made from an electrically non-conducting material.

Regarding claim 15, the electrically nonconducting material is plastic.

Regarding claim 18, the reference discloses a short printed circuit card assembly (comprising 21, 41, 61) inserted into an electronic system comprising a printed circuit card 83 mechanically coupled to the electronic system on a first edge (adjacent 69) and mechanically and electrically coupled to the electronic system on a connector edge (adjacent 73, 21) and a printed circuit card support, wherein the printed card support comprises a card guide end 21 coupled to the electronic system, a card receptor end 61 coupled with a second edge of the printed circuit card, and a support span 41 connecting the card guide end and the card receptor end.

Regarding claim 19, a span length of the printed card support is adjustable.

Regarding claim 22, the reference discloses a short card support (comprising 21, 41, 61) for supporting a short printed circuit card 83 having a first edge (adjacent 69) in an electronic system having a card guide 73, the short card support comprising a card guide 21 adapted to couple to the card guide of the electronic system, a card receptor end 64 adapted to couple with the first edge of the short printed circuit card, a support

Art Unit: 2841

span 41 connecting the card guide end and the card receptor end and means 67 for selectively positioning the card receptor end for reception of the first edge of the short printed circuit card.

Regarding claim 23, the means for selectively positioning the card receptor end includes a stop assembly 69.

Regarding claim 24, the means for selectively positioning the card receptor is a clasp.

Regarding claim 30, the reference discloses an electronic system comprising a short card 83 inserted into the electronic system, the short card having a first edge (adjacent 69) not coupled to the electronic system, and a support (comprising 21, 41, 61) spanning between the first edge of the short card and a card guide 73 of the electronic system.

Regarding claim 31, the support is a short card support.

Regarding claim 32, the short card support is an adjustable short card support.

Regarding claim 33, the short card support includes a card guide end 21 adapted to couple to the card guide of the electronic system, a card receptor end 61 adapted to couple with the first edge of the short card, and a support span 41 connecting the card guide end and the card receptor end.

6. Claims 26-29, 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Carney et al. (US 5,706,173). Regarding claim 26, the reference discloses a method of supporting a short printed circuit board 34 having a first edge (adjacent wall 24), a second edge (adjacent 61), the short printed circuit board insertable into an electronic

Art Unit: 2841

system 21 having guides (first guide provided with cover 32, second guide 52) the method comprising coupling the first edge of the short printed circuit card to a first card guide of the electronic system and supporting the second edge of the short printed circuit card with a short card support 37 comprising a card receptor end 66 removably attached to the second edge of the short printed circuit card, a card guide end 68 adapted to removably couple to a second card guide 52 of the electronic system and a support span 67 connecting the card receptor end and the card guide end.

Regarding claim 27, wherein the short printed circuit card includes a connector edge insertable into a connector plane 31 of the electronic system.

Regarding claim 28, the method further comprises electrically and mechanically coupling the connector edge of the short printed circuit card to the connector plane of the electronic system.

Regarding claim 29, wherein the method include adjusting a span length of the support span to bridge the distance between the card guide end coupled to the second card guide and the card receptor end removably attached to the second edge of the short printed circuit card.

Regarding claim 37, the electronic system is a computer system.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-4, 8-9, 12-13, 16-17, 20-21, 34-36 are rejected under 35 U.S.C. 102(b), or in the alternative, under 35 U.S.C. 103 (a) as being unpatentable over Cavanna (US 4,198,024).

Regarding claims 3, 12, 35, it appears from the drawings that the adjustable span length is selectively adjustable in a range from approximately 10% to 90% of a length of a card bay of the electronic system.

Furthermore regarding claims 3, 12, 35 it has been held that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 105 USPQ 233, 235 (CCPA 1955).

Regarding claims 4, 13, 36, it appears that the adjustable span length is selectively adjustable in a range from approximately 2-6 inches.

Furthermore regarding claims, 4, 13, 36 it has been held that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 105 USPQ 233, 235 (CCPA 1955).

Regarding claims 8, 17, 20, it appears that the short card support has a fixed length of less than 12 inches.

Furthermore regarding claims, 8, 17, 20 it has been held that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum value by routine experimentation.

Regarding claims 9, 16, 21, 34 the reference teaches that the card receptor end has a width to accommodate varying thickness short cards. It is also disclosed that the card support 1 is formed of a material that adds a small amount of flexibility, which would inherently be slightly flexible and therefore adjustable. Furthermore, it would have been obvious to provide for an adjustable means on the card support to accommodate varying thickness short cards to maximize the application of the card support to accommodate and secure any card configuration with varying height and/or length from the standard.

9. Claims 3-4, 8, 12-13, 17, 20, 35-36 are rejected under 35 U.S.C. 102(b), or in the alternative, under 35 U.S.C. 103 (a) as being unpatentable over Hsu (US 5,383,793).

Regarding claims 3, 12, 35, it appears from the drawings that the adjustable span length is selectively adjustable in a range from approximately 10% to 90% of a length of a card bay of the electronic system.

Furthermore regarding claims 3, 12, 35 it has been held that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 105 USPQ 233, 235 (CCPA 1955).

Regarding claims 4, 13, 36, it appears that the adjustable span length is selectively adjustable in a range from approximately 2-6 inches.

Furthermore regarding claims, 4, 13, 36 it has been held that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the

Art Unit: 2841

optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 105 USPQ 233, 235 (CCPA 1955).

Regarding claims 8, 17, 20, it appears that the short card support has a fixed length of less than 12 inches.

Furthermore regarding claims, 8, 17, 20 it has been held that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum value by routine experimentation.

10. It is noted that the 1C reference listed as Clark et al. on the IDS has not been considered as the patent number listed corresponding to this reference is incorrect. Therefore, the Clark reference has not been considered.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong T. Vu whose telephone number is (571) 272-2111. The examiner can normally be reached on Mon. & Tues., 7:30 AM - 4:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David S. Martin can be reached on (571) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

Application/Control Number: 10/618,966

Page 12

Art Unit: 2841

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


PTVu
Patent Examiner
3/19/04